

CLAIMS:

1-14. (Canceled)

15. (Currently Amended) A method for fabricating a structure or component comprising the steps of:

- (a) creating two skins or laminates by laying layers of plies of continuous fiber materials, at least one of the plies in each of the skins containing unidirectional fibers containing a low resin content of less than 20% by weight;
- (b) ~~braiding or weaving~~ unimpregnated fibers ~~to conform to the external shape of mandrels into a tubular sock, each sock containing a mandrel, defining a braided member;~~
- (c) placing a first one of the skin skins onto the inner face of one half of a matched mold;
- (d) placing ~~the over-braided or over-woven mandrels~~ braided members onto the first one of the skin skins so that ~~they~~ the braided members are contiguous with one another;
- (e) placing the second one of the other skin skins onto over the ~~top of the over-braided or over-woven mandrels~~ braided members; then
- (f) placing the other half of the matched mold over the second one of the skin of step (e) skins so that the inner face of the mold half is against the skin; then
- (g) ~~placing the resulting tooling/component assembly into a hydraulic press and~~ applying a compacting force that results in ~~mold closure of the halves of the mold; then~~
- (h) sealing the mold and drawing a vacuum inside the closed mold; then

- (i) ~~heating the mold; injecting resin into the mold to completely fill void areas; and~~
~~pressurizing the resin to a level sufficient to suppress formation of voids that~~
~~could be caused by moisture, solvents, or volatile reaction products and to~~
infuse the socks with the resin; and
- (j) heating the mold to a temperature for a period sufficient to cause ~~cure~~ curing of the
thermosetting resin and bonding of the socks to the skins, then removing one
of the top half halves of the mold, withdrawing the internal mandrels or
similar tooling details from the socks to define a molded structure, and
removing the part molded structure from the mold.

16.- 17. (Canceled)

18. (Currently Amended) The method of claim 15 wherein the some of the plies of each of the
skins or laminates are formed by intermixing layers of low pre-impregnated with resin content
layers and and other of the plies of each of the skins contain unimpregnated layers fibers.

19. (Currently Amended) The method of claim 15 wherein some of the plies of each of the
skins are formed by intermixing layers of are partially impregnated with resin and others of the
plies of each of the skins are fully impregnated continuous fiber materials with resin.

20. (Currently Amended) The method of claim 15 wherein the plies of each of the skins that
contain unidirectional fibers are are formed by intermixing layers of partially impregnated and
unimpregnated continuous fiber materials with resin.

FEB. 22. 2005 11:11AM

BRACEWELL & PATTERSON

NO. 7386 P. 5

21-25. (Canceled)